

REMARKS

Reconsideration of this application is now being requested. Claims 2-20 are in this application. Claim 2 has been amended.

35 USC §101 Rejection

Claim 2-20 were rejected as being unpatentable under 35 USC §101. Specifically, the office action alleges that claim 2 is directed to non-statutory subject matter because as a whole it does not accomplish a practical application. Applicants respectfully disagree.

The burden is on the USPTO to set forth a *prima facie* case of unpatentability. If the examiner determines that it is more likely than not that the claimed subject matter falls outside all of the statutory categories, the examiner must provide an explanation. Congress intended statutory subject matter to “include anything under the sun that is made by man.” It is improper to read into §101 limitations as to the subject matter that may be patented where the legislative history does not indicate that Congress clearly intended such limitations. The subject matter courts have found to be outside of, or exceptions to, the §101 statutory categories of the invention is limited to abstract ideas, laws of nature and natural phenomena, i.e., §101 judicial exceptions. An §101 analysis involves first determining whether the claims falls within one of the statutory categories. If the claims do not fall within one of the statutory categories, i.e., falls within one of the §101 judicial exceptions, then the examiner must ascertain the scope of the claim to determine whether it covers a practical application of the §101 judicial exception. See Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, pages 16-24.

Applicants respectfully submit that the USPTO has not set forth a *prima facie* case of unpatentability. First, the examiner has not identified under which §101 judicial exception the claims fall. Applicants do not believe that the claims fall under any of the judicial exceptions since it is neither an abstract idea, law of nature nor natural

phenomena. Note that a principal in the abstract is a fundamental truth. See page 17 of Interim Guidelines. The subject matter of claims 2-20 do not cover a fundamental truth.

Second, the examiner has not provided an explanation as to why the claims do not accomplish a practical application. The examiner makes a conclusory statement that the “claimed invention...does not accomplish a practical invention” and that “there is no tangible result disclosed for this method.” The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a §101 judicial exception, in that the process claim must set forth a practical application of the §101 judicial exception to produce a real world result. See page 21 of Interim Guidelines. Applicants submit that the claims do more than recite a §101 judicial exception (assuming that the claims fall under a §101 judicial exception). Specifically, the claims set forth a practical application to produce a real world result involving adjustment of a first channel condition threshold for an adaptive quality control loop.

Furthermore, if the invention as set forth in the written description is statutory, but the claims define subject matter that is not, the deficiency can be corrected by an appropriate amendment of the claims. In such a case, USPTO personnel should reject the claims drawn to the non-statutory subject matter under 35 USC §101, but identify the features of the invention that would render the claimed subject matter statutory if recited in the claim. See Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, page 16. Applicants respectfully requests the examiner to indicate whether the examiner believes the invention as set forth in the written description is statutory. If the examiner believes the invention as set forth in the written description to be statutory, applicants request the examiner to identify the features of the invention that would render the claimed subject matter statutory if recited in the claims.

#### 35 USC §101 Rejection – Nanda and Razavilar

Claims 2, 4, 7, 10-12 and 15-20 were rejected under 35 USC §103(a) as being unpatentable over Nanda (US 5,842,113) and further in view of Razavilar (US

Publication 2003/0104831). The office action alleges that Nanda and Razavilar, in combination, teach all of the limitations of claims 2, 4, 7, 10-12 and 15-20. Applicants respectfully disagree. Claim 2 recites the limitation of “the first variable size step is determined using a desired MCS error rate for the first MCS level.” Neither Nanda nor Razavilar, alone or in combination, teaches or suggests determining a variable size step using a desired MCS error rate for a MCS level. Nor has it been alleged in the current office action that Nanda nor Razavilar, alone or in combination, teaches or suggests determining a variable size step using a desired MCS error rate for an MCS level. It should be noted that the previous office action stated that Razavilar and Nanda teach all the subject matter of claim 2 except for the limitation of “determining the first variable step by using a desired MCS (i.e. Modulation and Coding Scheme) error rate for the first MCS level.” Since neither Nanda nor Razavilar teach or suggest determining a variable size step using a desired MCS error rate for an MCS level, it is felt that claim 2 is patentable under 35 USC §103(a) as being unpatentable over Nanda and Razavilar.

Claims 4, 7, 10-12 and 15-20 depend on, and include all the limitations of, claim 2. For the reasons discussed earlier, neither Nanda nor Razavilar teach or suggest the limitation of determining a variable size step by using a desired MCS error rate for a MCS level. Accordingly, it is felt that claims 4, 7, 10-12 and 15-20 are also patentable under 35 USC §103(a) over Nanda and Razavilar.

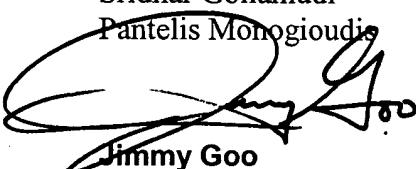
Allowable Claims

Claims 3, 5-6, 8-9 and 13-14 were objected to as being upon a rejected base claim but would have been allowable if rewritten into independent form. Claims 3, 5-6, 8-9 and 13-14 depend upon claim 2. For the reasons discussed above, it is felt that claim 2 is allowable. Accordingly, it is felt that claims 3, 5-6, 8-9 and 13-14 are allowable in their present form.

Respectfully submitted,

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